Bureau of Land & Water Quality

O&M Newsletter

February 2006

A monthly newsletter for wastewater discharge licensees, treatment facility operators, and associated persons

Table of Contents

CWSRF Funding Update as of January 19, 2006

Congress and the White House have completed action on the FY 2006 appropriations for the Environmental Protection Agency setting funding for the Clean Water State Revolving Fund (CWSRF) at $900 million. However, there remains uncertainty about the exact level of funds that will be available for the CWSRF programs.

The current situation is as follows:

There was a minor rescission of .476% from the original $900 million appropriation, leaving $895,716,000. This is the "enacted" funding level.

The President's proposed $166 million rescission of CWSRF funds (as part of the Katrina relief package) was rejected by Congress. This would have had the effect of reducing CWSRF funding to just under the President's FY 2006 budget proposal of $730 million.

The Department of Defense FY 2006 Appropriations Act, signed by the President on 12/30/05, applies a 1% rescission, government-wide, across-the-board, to all discretionary spending. This will apply to the State Revolving Funds. The amount remaining for the CWSRF after deducting the additional 1% rescission from the enacted level is $886,758,800.

Further complicating the funding situation is language in the EPA's FY 2006 appropriations measure that rescinded $80,000,000 "from prior year funds in appropriation accounts available to the EPA". This is aimed at funds connected with grants, contracts and interagency agreements for which the project period has expired and the funds were not obligated. At present, the EPA Office of the Chief Financial Officer is withholding 10% from the enacted FY 2006 SRF funds until it is determined where that money is going to come from.

Consequently, the current level of funds available for award to States is $806,144,400. For the State of Maine, this would equate to $6,127,000 in Federal capitalization funds for FY 2006. In 2004, Maine's CWSRF received $10,259,000 and $8,325,800 in 2005. So, the proposed 2006 Federal Cap Grant would be 40% less than in 2004.

Details of the proposed FY07 EPA SRF Budgets are below. Highlights include:

	FY07 Proposed	Change from FY06
Clean Water SRF	$687.60 Million	-$199.4 Million
Drinking Water SRF	$841.50 Million	$4.5 Million

Steve McLaughlin, CWSRF Engineering Manager

Wet Weather Operating Plan

A wet weather operating plan is intended to provide operators with a guide to minimize the discharge of pollutants during wet weather and to protect their facilities from upset.

A. Key Elements. Every wet weather operating plan should contain the following key elements:

? Goals of the Plan. The goals section will define the overall objectives of the wet weather operating plan with respect to protecting water quality and plant performance.
? Critical Components. The plan should list the critical components of the collection and treatment system that significantly impact wet weather performance. For each critical component, specific objectives should be defined.
? Operating Guidelines. For each critical component, the plan will contain step by step guidance for operation, maintenance, and management procedures to be followed before, during and after a wet weather event.
? List of Contacts. The plan should contain a list of important contacts that may be of assistance during wet weather events.

1. Goals of the Plan. The goals of the plan should define the water quality objectives of the collection and treatment system. For most systems with combined sewer overflows, operating decisions made during wet weather events can affect how much flow is treated at the wastewater treatment plant and how much flow is bypassed through CSOs. Difficult decisions must be made rapidly. These decisions may affect water quality in the receiving water at the CSOs, water quality in the receiving water at the plant, and performance of the plant during and after the wet weather event. Well defined goals for receiving water quality will help guide the development of operating guidelines for the plant and help guide decision making during wet weather events. It may be necessary to obtain advice from the Maine DEP in setting water quality priorities.

2. Critical Components. The critical components are processes in the collection system (such as CSO regulators or pumping stations) or the treatment plant (such as bar screens or aeration tanks) which can

significantly affect treatment of wet weather flow (or can be significantly affected by wet weather flow). The list of critical components is unique to each facility. One plant's critical components may not be critical at another facility. The Wet Weather Operating Plan is not intended as a substitute for the plant's operation and maintenance manual. Components that have no bearing on wet weather operations will not be listed. As an example, a collection system may include multiple wastewater pumping stations, but not all stations may le listed as critical components. Unlisted stations might serve a new portion of the sewer system that has no combined sewers and little I/I. Though regular operation and maintenance procedures are essential at a pumping station, no special procedures may be needed at these stations during wet weather.

Any major unit process in the collection system or the wastewater treatment plant that is handling wet weather flows should be included on the list of critical components. Even if the process does not normally present special problems during wet weather it should be included on the list if it is handling wet weather flows. In addition, auxiliary processes that are impacted by wet weather flows should be included. If, for example, special provisions for sludge handling must be made during wet weather, a sludge thickening, stabilization or dewatering processes might be included on the list of critical components.

3. Operating Guidelines. Operating Guidelines should be developed for each critical component identified in the collection system and treatment plant. For each component, tasks should be listed for completion before, during and after a wet weather event. Task descriptions should be brief and specific. The wet weather operating plan is intended to serve as a quick reference during a wet weather event. This is not the place for a detailed description of the theory behind a treatment process. The description must be specific enough, however, to describe exactly what needs to be accomplished. For example, "Check water level in influent channel" may not be specific enough. But, "Check water level in influent channel. Open feed gate to second bar screen if water level is above 3-foot mark on staff gauge" provides specific direction based upon a required observation.

4. List of Contacts. Develop a list of contacts that can provide advice or assistance during a wet weather event. The list should include supervisors, and other involved public officials, equipment representatives and service organizations, local and state regulatory agencies, utilities, and emergency contacts such as fire department, police department and ambulance.

B. Plan Development. The operation and maintenance staff that actually run the facility should develop the wet weather operating plan. If outside assistance is obtained for plan development, the plant staff should have a significant role in providing input, guidance, and review of the operating plan. The key steps in plan development are as follows:

? Identify personnel to be involved and form development team
? Break down plant and collection system into physical areas
? Break down areas into unit processes
? By unit process, list wet weather O&M procedures to be followed before, during, and after each wet weather event.
? Review and refine list of procedures
? Evaluate and continue to revise procedures (continuous process improvement)

At a large facility, the development team may include a large number of people with diverse roles at the plant. At a small plant, the development team may include the entire plant staff. Each of the steps in the development process can be initiated effectively through a brainstorming meeting with ideas contributed by all present. The detailed procedures can then be further developed in smaller work groups.

The completed Wet Weather Operating Plan should not be considered a final document. The plan should be subject to revision whenever operating experience at the plant demonstrates improved or additional procedures to be included. The plan should be kept in a three-ring notebook that can be easily modified as new revisions are developed. Even after the initial plan is developed, investigate some of the suggestions made in this manual, and other ideas that are developed at your plant. Test and compare various procedures to find new ways to treat more flow more efficiently at your facility. Never stop looking for new ways to make your plant provide better, more efficient performance and further reduce untreated overflows.

Don Albert

Electronic Copies of the O&M news

We continue to distribute the *O&M News* electronically to anyone who sends us a valid email address. We also have the current *O&M News* and archived copies of past issues on our web site but e-mail is a quicker way to get the news in your hands.

If you have e-mail and would like to receive the O&M News electronically instead of in the mail, please send an e-mail to: dick.darling@state.me.us

For Practice

1) Short circuiting in clarifiers may be causes by
   a. density differences
   b. high pH levels
   c. nutrient deficiency
   d. solids loading

2) What is the best first aid for a first degree burn?
   a. Bandage the wound tightly.
   b. Spread a greasy salve on the wound.
   c. immerse the wound in cold water.
   d. submerge the wound in warm water.

3) Your unseeded dilution water samples in a BOD test show an oxygen depletion of more than 0.2 mg/L in five days. What is the most likely cause of the problem?
   a. The initial D.O. was less than 9.0 mg/L
   b. The buffers are contaminated.
   c. Not enough seed is being used.
   d. Toxic substances are present.

4) Why should sludge be digested or treated before land spreading?
   a. To reduce odors and BOD.
   b. To disinfect the sludge and return the supernatant for additional treatment.
   c. To reduce the bacterial population and produce gas.
   d. To reduce the volume of solids and stabilize the solids for odor and vector control.

Approved Training

February 14, 2006 in Brunswick, ME – Vulnerability Assessment & Emergency Response Planning for Wastewater Systems - sponsored by MRWA (207) 729-6569 – Approved for 3 hours
*****

February 15, 2006 in Portland, ME – Pipebursting, a Practical and Diverse Rehab Option - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****

February 16, 2006 in Bangor, ME – Vulnerability Assessment & Emergency Response Planning for Wastewater Systems - sponsored by MRWA (207) 729-6569 – Approved for 3 hours
*****

March 1-3, 2006 in Bangor, ME – O&M of Wastewater Collection Systems - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****

March 7, 2006 in Presque Isle, ME – Ten Best Kept Water & Wastewater Process Management Secrets - sponsored by MRWA = (207) 729-6569 – Approved for 4 hours
*****

March 8, 2006 in Bangor, ME – Ten Best Kept Water & Wastewater Process Management Secrets - sponsored by MRWA = (207) 729-6569 – Approved for 4 hours
*****

March 8, 2006 in Augusta, ME – Microsoft Access for Water and Wastewater Operators - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****

March 9, 2006 in East Machias, ME; Falmouth, ME & Waterville, ME – Ten Best Kept Water & Wastewater Process Management Secrets - sponsored by

MRWA = (207) 729-6569 – Approved for 4 hours
*****
March 14, 2006 in North Vassalboro, ME – The Impact of Water Treatment Practices on Wastewater Treatment Plant Operations - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****
March 14, 2006 in Farmington, ME – Maine Driving Dynamics - sponsored by MRWA = (207) 729-6569 – Approved for 5 safety hours
*****
March 21, 2006 in Scarborough, ME – Maine Driving Dynamics - sponsored by MRWA = (207) 729-6569 – Approved for 5 safety hours
March 23, 2006 in Gardiner, ME – Maine Driving Dynamics - sponsored by MRWA = (207) 729-6569 – Approved for 5 safety hours
*****
March 27, 2006 in Portland, ME – Nitrification & Denitrification in Wastewater Facilities - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****
March 28, 2006 in Norway, ME – Instrumentation Calibration Basics - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****
March 28, 2006 in Bangor, ME – Maine Driving Dynamics - sponsored by MRWA = (207) 729-6569 – Approved for 5 safety hours
*****
March 30, 2006 in Easton, ME – Maine Driving Dynamics - sponsored by MRWA = (207) 729-6569 – Approved for 5 safety hours
*****
April 4, 2006 in Brewer, ME – A Day in the Wastewater Lab - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****
April 12, 2006 in Orono, ME – Microsoft Access for Water and Wastewater Operators - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****
April 27, 2006 in Lewiston, ME – Water & Wastewater Technology Seminar - sponsored by MRWA – 207-729-6569 – Approved for 3 hours
*****
May 3, 2006 in Freeport, ME – Residuals Management through Compound Loop Systems - sponsored by JETCC – 207-253-8020 – Approved for 6 hours
*****
Note:
JETCC stands for Joint Environmental Training Coordinating Committee
MRWA stands for Maine Rural Water Association
MWWCA stands for Maine Wastewater Control Association
NEIWPCC stands for New England Interstate Water Pollution Control Commission
WPETC stands for Wright Pierce Environmental Training Center.

Enforcement News

Mid-Coast Island to Eliminate It's Overboard Discharge System

At its February 2, meeting, the Board of Environmental Protection approved an Administrative Consent Agreement and Enforcement Order that will remove all wastewater discharges from around a popular mid-coast island. The island contains a century-old community of some 110 homes and community

buildings that discharged wastewater through ten outfalls located around its perimeter. Violations cited in the Consent Agreement included failing to do the following: maintain the system in good working order; maintain a schedule for inspecting and pumping the septic tanks; properly chlorinate the effluent; properly maintain the outfalls; do all required monitoring; and, comply with effluent limits. Beginning in 2006, the wastewater will be pumped through a mile long force main to the mainland for treatment and disposal in a publicly owned wastewater treatment facility. The licensee has paid $10,000 in penalties and another $19,702 will be due if the new system is not completed by June 1, 2006.

John Glowa

Spring 2006 Exam

The Spring wastewater operator certification exam, it will be given on May 10, 2006 in the usual locations. This is the first exam that will be administered through the JETCC Office. Applications ***must*** be postmarked by March 24, 2006 or in JETCC's hands by March 27, 2006.

Dick Darling

Answers to *For Practice:*

1. (a) The mixed liquor entering the clarifier is denser that the clean water leaving the clarifier. The difference in the densities can cause a current that can carry the solids along the floor of the clarifier and out over the effluent weirs.
2. (c) According to the American Red Cross, the best first aid for a first degree burn is to keep the effected area under cold water
3. (b) If the D.O. depletion in your unseeded dilution water is more than 0.2 mg/L, the problem is usually either dirty glassware or contaminated buffers
4. (d) Sludge is treated to remove as much water as possible and reduce the organic matter to help lessen odor problems and make the sludge less attractive to vectors like insects and vermin.